

Amendments To The Claims

1 – 11 (cancelled)

12. (currently amended) A method for performing data transmission via a subscriber's connection located in an Ethernet communication network ~~which is in accordance with Ethernet transmission method~~, the method comprising:

having defining a connection data that represents the subscriber's connection, wherein the connection data includes a port identification that uniquely identifies a subscriber's connecting line corresponding to the subscriber's connection;

defining a subscriber data including a user name and a password, wherein the connection data and the subscriber data in combination uniquely identify the subscriber's connection;

transmitting the connection data and the subscriber data to be transmitted via the subscriber's connection in accordance with a predefined protocol for the Ethernet communication network comprising at least a discovery stage to establish a session based on data supplied in one or more discovery messages~~PPPoE transmission method and in accordance with RFC 2516;~~

inserting the connection data and the subscriber data as respective tags in "Relay Session ID-TAG" into PPPoE Active Discovery~~said one or more discovery messages;~~

transmitting the PPPoE Active~~said one or more Discovery~~ discovery messages to the communication network via the subscriber's connection; and

authenticating a session the data to be transmitted via the subscriber's connection by using the combination of the connection data and the subscriber data which is contained in the PPPoE Active Discovery~~said one or more discovery messages, wherein the session is established upon a joint verification of the connection data and the subscriber data which in combination identify the subscriber's connection, said joint verification of the connection data and the subscriber data enhancing a likelihood of accurately authenticating the session through the subscriber's connection.~~

13. (cancelled)

14. (previously presented) The method as claimed in claim 12, wherein the connection data is stored in the communication network.

15. (cancelled)

16. (currently amended) The method as claimed in claim 12, wherein the subscriber's connection is allocated to a switching device located in the communication network,

wherein the connection data and the subscriber data are ~~is inserted as "Relay Session ID TAG" into the PPPoE Active Discovery messages~~ into said one or more discovery messages through the switching device,

wherein said one or more discovery ~~the PPPoE Active Discovery messages~~ which contains the connection data and the subscriber data are ~~is~~ transmitted to an access network element located in the communication network,

wherein the ~~specific TAG value of the Relay Session ID TAG~~ respective tags which represents the connection data and the subscriber data contained in the messages is extracted in the access network element, and

wherein the extracted connection data and the subscriber data ~~is~~ are transmitted from the access network element to an authentication network element located in the communication network where the joint verification of the connection data and the subscriber data is performed; and

~~wherein the data to be transmitted is verified by the authentication network element by using the connection data.~~

17-23. (cancelled)

24. (currently amended) The communication ~~system~~ device as claimed in claim ~~49~~25, wherein the subscriber's connection and the transmitter are allocated to a switching device located in the communication network.

25. (currently amended) A communication device for a communication system for performing data transmission via a subscriber's connection located in an Ethernet communication network ~~which is in accordance with Ethernet transmission method~~, comprising:

a connection data including a port identification that uniquely identifies a subscriber's connecting line corresponding to the subscriber's connection that represents a subscriber's connecting line that is connected to the subscriber's connection;

a subscriber data including a user name and a password, wherein the connection data and the subscriber data constitutes a combination of data that uniquely identifies the subscriber's connection;

a transmitter that is allocated to the communication device and transmits the connection data and the subscriber data to the communication network; and

an authenticator located in the communication network that verifies authenticity of data to be transmitted a session via the subscriber's connecting line by using the connection data and the subscriber data,

wherein the connection data and the subscriber data is transmitted via the subscriber's connection in accordance with a predefined protocol for the Ethernet communication network comprising at least a discovery stage to establish a session based on data supplied in one or more discovery messages transmitted via the subscriber's connection to the communication network ~~the data to be transmitted in the communication network via the subscriber's connection is transmitted in accordance with PPPoE transmission method and in accordance with RFC 2516,~~

wherein the connection data and the subscriber data are inserted as respective tags into said one or more discovery messages ~~is inserted as the "Relay Session ID TAG" into PPPoE Active Discovery messages via the transmitter and is transmitted via the subscriber's connection to the communication network,~~

wherein the authenticator is configured to authenticate a session via the subscriber's connection by using the combination of the connection data and the subscriber data contained in said one or more discovery messages, wherein the session is established upon a joint verification of the connection data and the subscriber data which in combination identify the subscriber's connection, said joint verification of the connection data and the subscriber data enhancing a likelihood of accurately authenticating the session through the subscriber's connection.

26. (previously presented) The communication device as claimed in claim 25, wherein the subscriber's connecting line is a wire connecting line through which the subscriber is physically connected to the communication network.